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ABSTRACT

The Special Secondary Impact Program instituted in 14 California secondary schools provided counseling and part time jobs to migrant students to help them stay in school long enough to graduate. The study examined the program's effect on inter- and intra-state migrant secondary school students. Variables measured migrant enrollment, migrant enrollment in various types of courses (vocational, college and university preparatory, and other classes), and number of migrant students graduating. Each target school was paired to a comparison school with like population size, migrant impaction, and socio-economic description; migrant students participating in the work study program were compared with other migrants in their own schools as well as in the comparison school. Data were developed from 1975 through 1978. In 1977-78 substantial enrollment increases for migrant students were noted at the target schools. No change in number of school enrollment days for students participating in the program was seen. Participation in work study seemed to increase the proportion of college preparatory classes taken in high school by a student as well as the proportion of vocational classes taken by a female student. For all three years target schools had greater percentages of migrants graduating; tables and graphs suggest that the target migrant students graduated more often than the comparison students. However, all three groups of migrants graduated with approximately the same degree of frequency in 1977-78. (DS)

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FINAL REPORT

SECONDARY IMPACT STUDY

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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By

Ira Nelken

IRA NELKEN AND ASSOCIATES, INC.
CHICO, CALIFORNIA

September 1, 1978

RC 011096

Additional information on the Secondary School Impact Program (work study and counselors/advisors) for Migrant Students in Region II of the State of California, is available in "Factors Influencing Migrant High School Students to Drop Out or Graduate From High School" produced by Ira Nelken & Associates, Inc., July 24, 1978, for Region II, California Migrant Education, Butte County Superintendent of Schools' Office, Oroville, California, and distributed by Ira Nelken & Associates, Inc., 315 Orient Street, Chico, California 95926.

ABSTRACT

FINAL REPORT

SECONDARY IMPACT STUDY

This report describes the effect of an experimental work study, Special Secondary Impact Program in California schools on inter-and intra-state migrant secondary school students. The Special Secondary Impact Program provided counseling and part time jobs for migrant students who were in need of financial academic assistance to continue their education.

The study, using a treatment/comparison group model, describes the effect of the program on migrant enrollment in schools (unduplicated enrollment counts and average number of enrollment days per migrant student), targeted individual enrollment histories, changes in migrant enrollment in types of courses in school (vocational, college preparatory, university preparatory, and other courses), and changes in numbers of migrants graduating high school (actual numbers graduating and per sections of school personnel). Data for the study were developed from 1975 through 1978.

Several of the variables show substantial differentiation among migrants in the Special Secondary Impact Program, other migrant students at the same schools, and migrant students at comparison non-impact schools as well as differentiation between male and female students.

By

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SECONDARY IMPACT STUDY

I. INTRODUCTION TO STUDY AND PROCEDURES

This report describes longitudinal data on Status I and II migrant students enrolled in Experimental Work Study/Special Secondary Impact schools and also compares results attained with selected comparison schools without impact programs. This report discusses data from fourteen impact schools in Regions II and VII which had initiated migrant work study programs as of January 1, 1978. Though all data reported have been collected as well on the fifteenth "possible" treatment school, no viable comparison school was available, and this school has, therefore, not been included in the data presented in this report. Comparison schools for these fourteen schools are in Regions II, VII, III, and VIII. Migrant students included in this study were the students who were enrolled in a school as of February, 1978. Any new enrollment after February 1978 was ignored. Any students disenrolled between February and June were dropped from the study.

Each studied target school has been paired to a comparison school with like population size (school enrollment size), like migrant impaction (percentage of Status 1 and 2 migrants in the school), and like geographical and social-economic descriptions (agricultural valley school is matched to agricultural valley school, urban area school is matched to urban area school, and so forth) to allow for greatest generalization of results. Two of the fourteen target schools studied have been participating in migrant work study programs the past two years (1976-77 and 1977-78). Twelve initiated migrant work study programs in this project year (1977-78).

This report relates to the three variables measured in this study. The three variables are: (1) migrant enrollment in schools, (2) migrant enrollment in various types of courses in schools (school program), and (3) number of migrant students who graduate from high school.

For the enrollment in school variable, two factors of variation are measured: (1) unduplicated enrollment ccunts available from MSRTS, Little Rock, Arkansas, and (2) number of total enrollment days divided by the unduplicated enrollment count (an average enrollment days per migrant student). Data were collected for the period, two years prior to implementation of the impact program in each school to the present, for: (1) enrollment counts and total average FTE's per school, and (2) individual enrollment histories of migrant student work study participants.

For the enrollment in various types of courses in schools variable, data were collected at each school site on courses migrants took. Courses were classified as: (1) vocational education, (2) college preparatory, (3) university preparatory, or (4) other classes.

For the graduation from high school variable, data were collected at each school site on: (1) for the time period two years prior to implementation of the impact program in the school to the present, numbers of migrant students who graduated from high school each year, and (2) for present year twelfth grades, numbers of migrant students expected to graduate in February and May and numbers who actually graduated in June.

II. OVERVIEW OF WORK STUDY/IMPACT PROGRAMS

The special secondary impact program provides counseling and part-time jobs for migrant students who are in need of financial and/or academic assistance to continue their education. Students must attend school if they are to remain employed and in the program.

The primary goal of the program is to assist secondary migrant students to remain in school, so that they may graduate. A further goal is to nurture student self-confidence, and to produce student educational aspirations which extend further than high school graduation. The program provides migrant students with non-agricultural job opportunities.

Program goals are to be achieved by meeting the following objectives:

1. Students will meet some of their own financial needs, as well as those of their family, by receiving remuneration for their work.
2. Students will develop more positive attitudes toward school and the learning process.
3. Students will gain skills in specific job areas.
4. Students will gain self-confidence, which will assist them in applying for future jobs.
5. Students will improve their language and communication skills.
6. Students will increase their feelings of self-worth.
7. Students will raise their educational aspirations through counseling and appropriate role modeling.

Work study advisors provide students with the moral support and necessary counseling to succeed in meeting impact program objectives.

More work study advisors were employed in secondary impact programs this year than ever before. Most were formerly community liaisons from the regional

area in which they were hired. Ideally, in the impact program, the advisor:

1. Nurtures a relationship of trust and guidance with the students and their families.
2. Works closely with the community and public agencies to obtain positions of employment for students.
3. Attempts to integrate other youth employment agencies (such as ROP, MOVE, YTP, CETA, and others) into the work study/secondary impact program. Thus, more students are reached by the program than would be using the limited number of Migrant Education funded work study slots available.
4. Promotes awareness amongst school personnel as to migrant students' needs.
5. Keeps in close contact with school counselors to monitor the academic progress of the students.

Advisors work closely with students to place them in jobs which interest them, and, when possible, which offer future career opportunities. Advisors are also available for personal counseling. In the 1977-78 secondary impact program, students were placed in a variety of part-time jobs. Several examples of job placement were: tutorial aide, clerical assistant, sales, hospital aide, custodial work, animal shelter work, mechanic apprentices, and public agency work.

Work study advisors also attempt to orient the students to how to fill out applications, how to conduct themselves in interivews, the importance of promptness, the acceptance of responsibility, and other such job "success" practices.

Advisors place students in work study slots based on the following set of criteria and priorities:

1. The student must be an identified status I or II migrant.
2. Dropouts are to be considered first.
3. Students with low grade point averages who display potential for dropping out receive priority.

4. Financial need is to be considered in filling slots.
5. Students who lack in graduation credits, and/or are considered old for their grade level, (therefore, may feel out of place) are given priority.
6. Students who show an interest in working for the experience of working are to be considered.

III. MIGRANT ENROLLMENT IN SCHOOLS VARIABLE

Methodology

Ira Nelken & Associates, Inc. received from Little Rock, Arkansas, on July 7, 1978 and August 8, 1978, computer printouts summarizing unduplicated enrollment counts, and numbers of total enrollment days, for each target and comparison school. The data were for the years 1975-76, 1976-77, and 1977-78.

Individual enrollment histories of target work study migrant students for this same period were also received from Little Rock, Arkansas.

Inspection of the data revealed the MSRTS records available at Little Rock did not reflect end of year updating from regions for either school or each target individual's enrollment history.

Data in Ira Nelken & Associates' files, however, allowed evaluation personnel to reconstruct and accurately tabulate number of total enrollment days for ten matched sets of target and comparison schools and fourteen target schools, and target individual enrollment histories for target students at all fourteen target schools.

The number of total enrollment days calculated were divided by the unduplicated enrollment count to derive the average number of enrollment days per migrant student.

Analysis of Data Collected -- Unduplicated Enrollment Counts

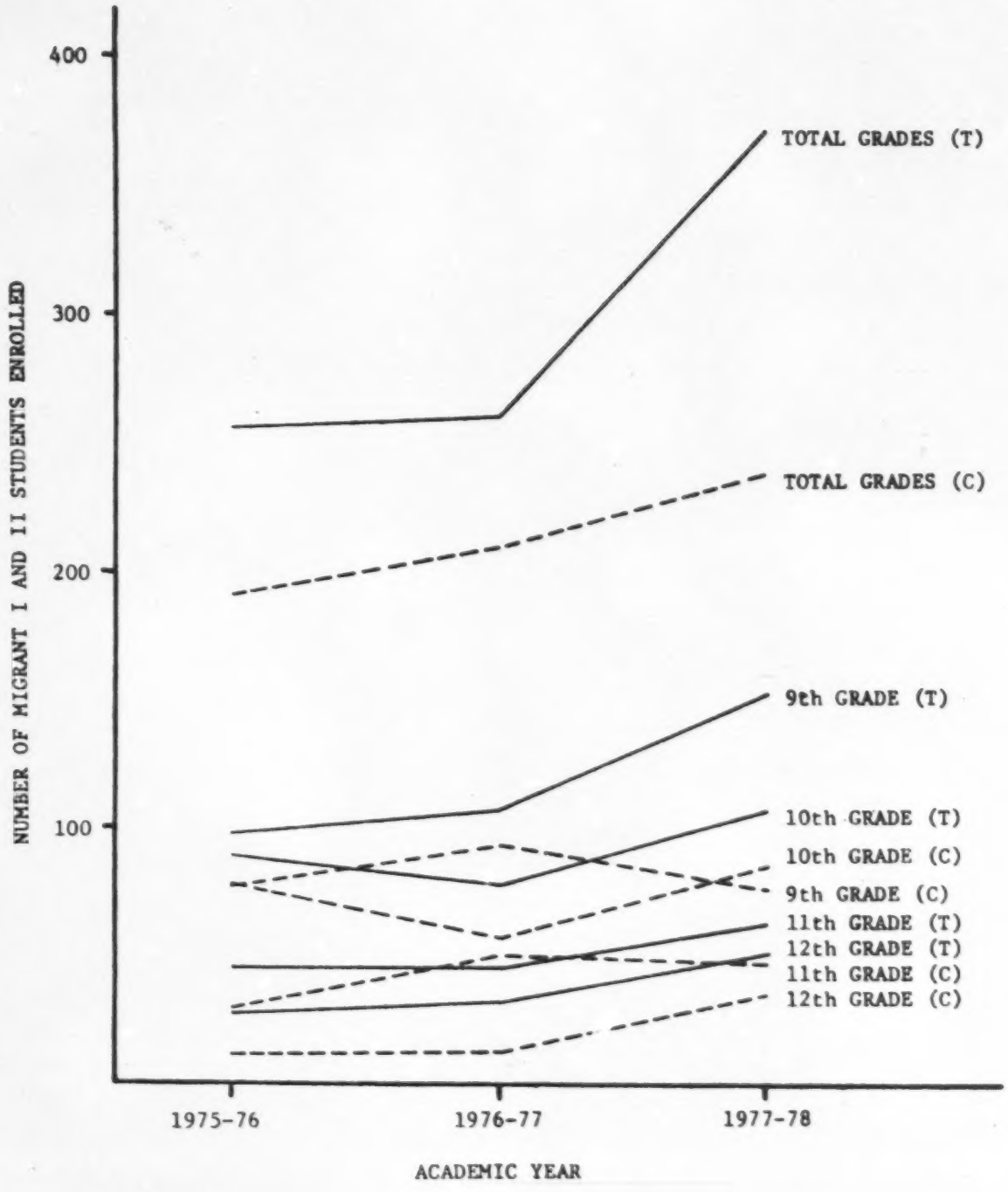
The table on the following page, and the graphic display which follows the table, indicate unique counts of high school migrant enrollment at ten treatment and their ten comparison schools 1975-76 through 1977-78. The unique counts are of all Status I and II migrant students enrolling between September 1 and May 31 of each year.

HIGH SCHOOL MIGRANT ENROLLMENT (STATUS 1 AND 2 ONLY)
AT TEN TREATMENT SCHOOLS AND THEIR TEN COMPARISON SCHOOLS
1975-76 THROUGH 1977-78

Group	Grade Level	NUMBER MIGRANTS ENROLLED			ENROLLMENT CHANGE IN NUMBERS			ENROLLMENT CHANGE IN PERCENT		
		1975-76	1976-77	1977-78	Increase 1975-76/ 1976-77	Increase 1976-77/ 1977-78	Increase 1975-76/ 1977-78	Increase 1975-76/ 1976-77	Increase 1976-77/ 1977-78	Increase 1975-76/ 1977-78
TREATMENT SCHOOLS	9	97	107	152	+10	+45	+55	+10.3%	+42.1%	+56.7%
	10	88	78	107	-10	+29	+19	-11.4%	+37.2%	+21.6%
	11	43	44	61	+1	+17	+18	+2.3%	+38.6%	+41.9%
	12	27	31	50	+4	+19	+23	+14.8%	+61.3%	+85.2%
	TOTAL	255	260	370	+5	+110	+115	+2.0%	+42.3%	+45.1%
COMPARISON SCHOOLS	9	75	92	75	+17	-17	0	+22.7%	-18.5%	0.0%
	10	76	56	84	-20	+28	+8	-26.3%	+50.0%	+10.5%
	11	28	49	46	+21	-3	+18	+75.0%	-6.1%	+64.3%
	12	11	12	34	+1	+22	+23	+9.1%	+183.3%	+209.1%
	TOTAL	190	209	239	+19	+30	+49	+10.0%	+14.4%	+25.8%

HIGH SCHOOL MIGRANT ENROLLMENT (STATUS I AND 2 ONLY)

1975-76 THROUGH 1977-78



The number of migrant students enrolled in target schools has increased by almost 50 percent from 1975-76 (255 migrant students) to 1977-78 (370 migrant students). Almost all of this increase has occurred between 1976-77 and 1977-78, (the first year of secondary impact program impact). This tremendous increase in identified and enrolled students has occurred with some variations at each of the four studied grade levels, though the greatest percentage increases in enrollment have occurred at the ninth (56.7 percent) and twelfth (85.2 percent) grade levels. Increases in comparison school enrollment (grades 9 - 12) showed small increases of approximately ten percent per year.

Raw number increases in unduplicated enrollment counts at target schools, grade levels 9 - 12 aggregated, indicate substantial increases in identified enrolled migrant students at these schools from 1976-77 to 1977-78, but not from 1975-76 to 1976-77. Raw number increases at treatment schools have shown a similar pattern at all grade levels (larger increases from 1976-77 to 1977-78 than from 1975-76 to 1976-77). A very wide variation among grade levels is evidenced at comparison schools, some grades experienced substantial increases and some experienced little to no increase. Overall, comparison school raw number enrollment increases showed no pattern over the three years and were not as substantial as increases in target schools.

The population size at grades eleven and twelve are rather small, and percentage increases within small populations can be rather meaningless statistics and must be treated with caution.

From 1975-76 to 1976-77, slightly greater enrollment increases occurred at comparison schools than at the treatment schools. The greater enrollment increase in comparison schools was neither substantial nor significant. From 1976-77 to 1977-78, much greater enrollment increases occurred at treatment schools than at comparison schools. This greater enrollment increase in treatment schools was very substantial and must be considered significant. Migrant impact programs/

work study programs were implemented for the first time in the ten treatment schools in 1977-78. It is very reasonable to assume that the secondary impact programs implemented relate to and were a causative factor in the substantial enrollment increases noted at target schools, compared to comparison schools.

Conclusion

Secondary impact program schools have been experiencing very substantial unique body count enrollment increases in migrant students at all grade levels in 1977-78. The effect has been pronounced at all grade levels (9 - 12) examined. Enrollments at target schools have shown substantially greater percentage increases than have enrollments at comparison schools.

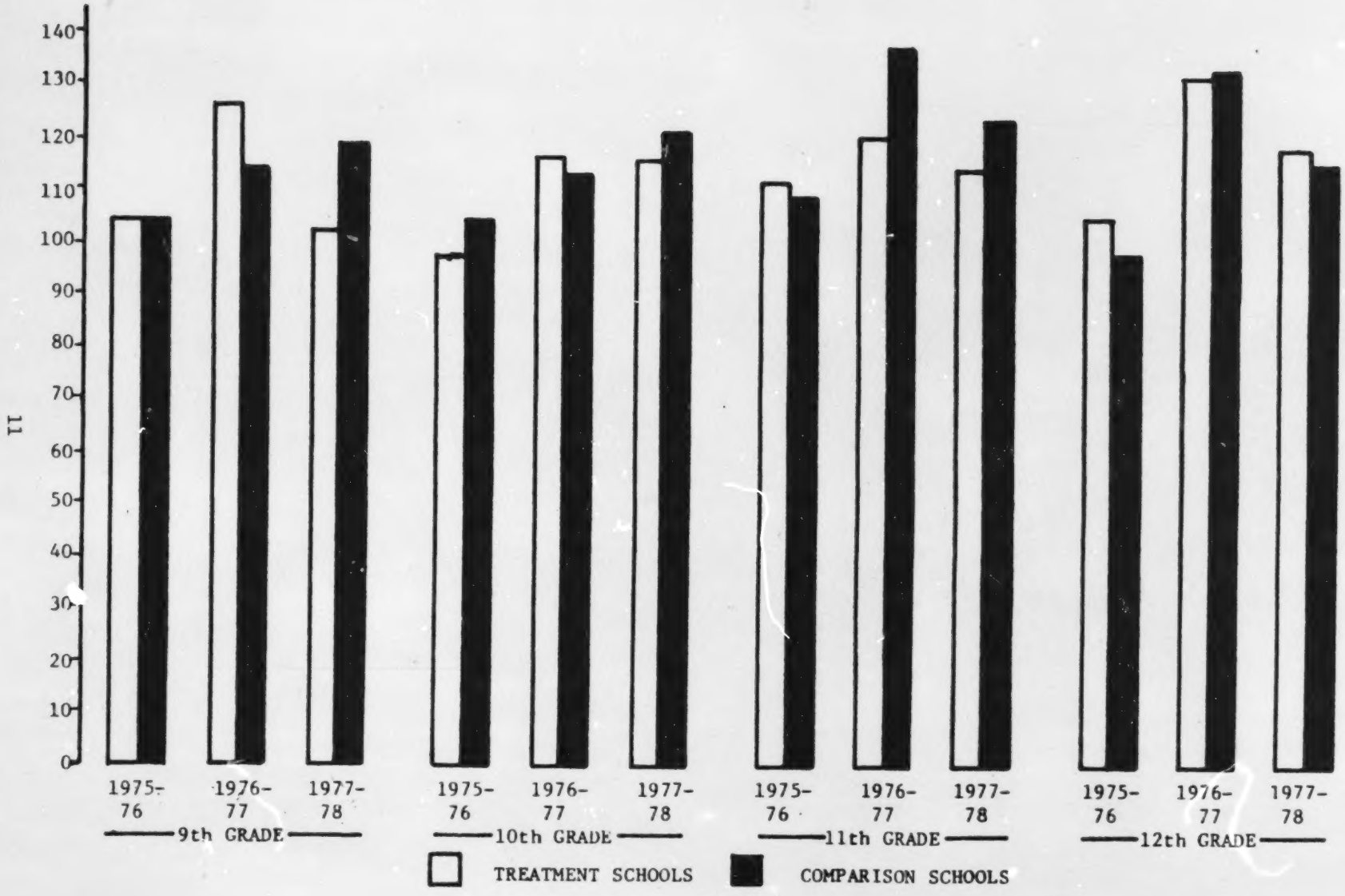
Analysis of Data Collected -- Average Number of Enrollment Days per Migrant Student

The table below, and the graphic display on the following page, indicate average number of enrollment days per migrant student per grade level at ten treatment, and their ten comparison schools, 1975-76 through 1977-78. The average number of enrollment days is for all status I and II migrant students enrolling between September 1 and May 31 of each year.

AVERAGE NUMBER OF ENROLLMENT DAYS PER MIGRANT STUDENT,
TEN TREATMENT VERSUS TEN COMPARISON SCHOOLS (GRADES 9 - 12)
IN 1975-76, 1976-77, AND 1977-78

Grade Level	Target Schools			Comparison Schools		
	1975-76	1976-77	1977-78	1975-76	1976-77	1977-78
9	104.38	126.30	102.16	104.20	113.74	118.31
10	96.81	116.24	115.56	104.04	112.96	120.99
11	112.42	119.95	114.20	108.71	137.00	122.85
12	104.85	131.90	118.28	97.82	132.00	115.18

AVERAGE NUMBER OF ENROLLMENT DAYS PER MIGRANT STUDENT
TEN TREATMENT VERSUS TEN COMPARISON SCHOOLS (GRADES 9-12)
1975-76, 1976-77 AND 1977-78



Average number of enrollment days per migrant student displayed at each grade, 9 - 12, indicates neither a discernable difference between target and comparison group schools, nor any trends occurring by grade levels. Sometimes target schools have higher average number of days of enrollment, sometimes comparison schools have higher average number of days of enrollment. The same statement is true among grade levels. The average variance is approximately 36, therefore, no significant differences among average number of days of enrollment occur among grade levels or among treatment/comparison groups.

Though no significant difference is found among the years examined, a tendency for 1976-77 to have the highest average number of enrollment days can be noted. This greater average number of enrollment days in 1976-77 may have been an effect of the California drought --- migrant children may have stayed enrolled in school for longer periods of time, since the drought effected and lessened the amount of crops to be worked with.

Data on average number of enrollment days per migrant student from the fourteen treatment schools (without comparison data) are presented in the table below. The data display the same characteristics described for the ten treatment schools discussed above.

AVERAGE NUMBER OF ENROLLMENT DAYS PER MIGRANT STUDENT
FOURTEEN TREATMENT SCHOOLS (GRADES 9 - 12)
IN 1975-76, 1976-77, AND 1977-78

Grade Level	Average Number of Enrollment Days		
	1975-76	1976-77	1977-78
9	112.78	130.13	111.15
10	109.91	122.33	119.22
11	112.32	130.05	124.68
12	115.15	138.59	127.17

Conclusion

Neither longitudinal (over the years) nor comparative (vs. comparison group) evidence for a substantive increase, or a change in average number of enrollment days per migrant student, has been found in treatment (secondary impact) schools.

Analysis of Data Collected -- Target Individual Enrollment Histories

The table following and the graphic display which follows the table, indicate for grade 9 - 12 migrant students participating in the work study/secondary impact program on February 1, 1978, summary statistics of their individual enrollment histories over the past three years.

NUMBER OF DAYS ENROLLED FOR MIGRANT STUDENTS,
GRADES 9 - 12, PARTICIPATING IN THE WORK STUDY PROGRAM ON FEBRUARY 1, 1978

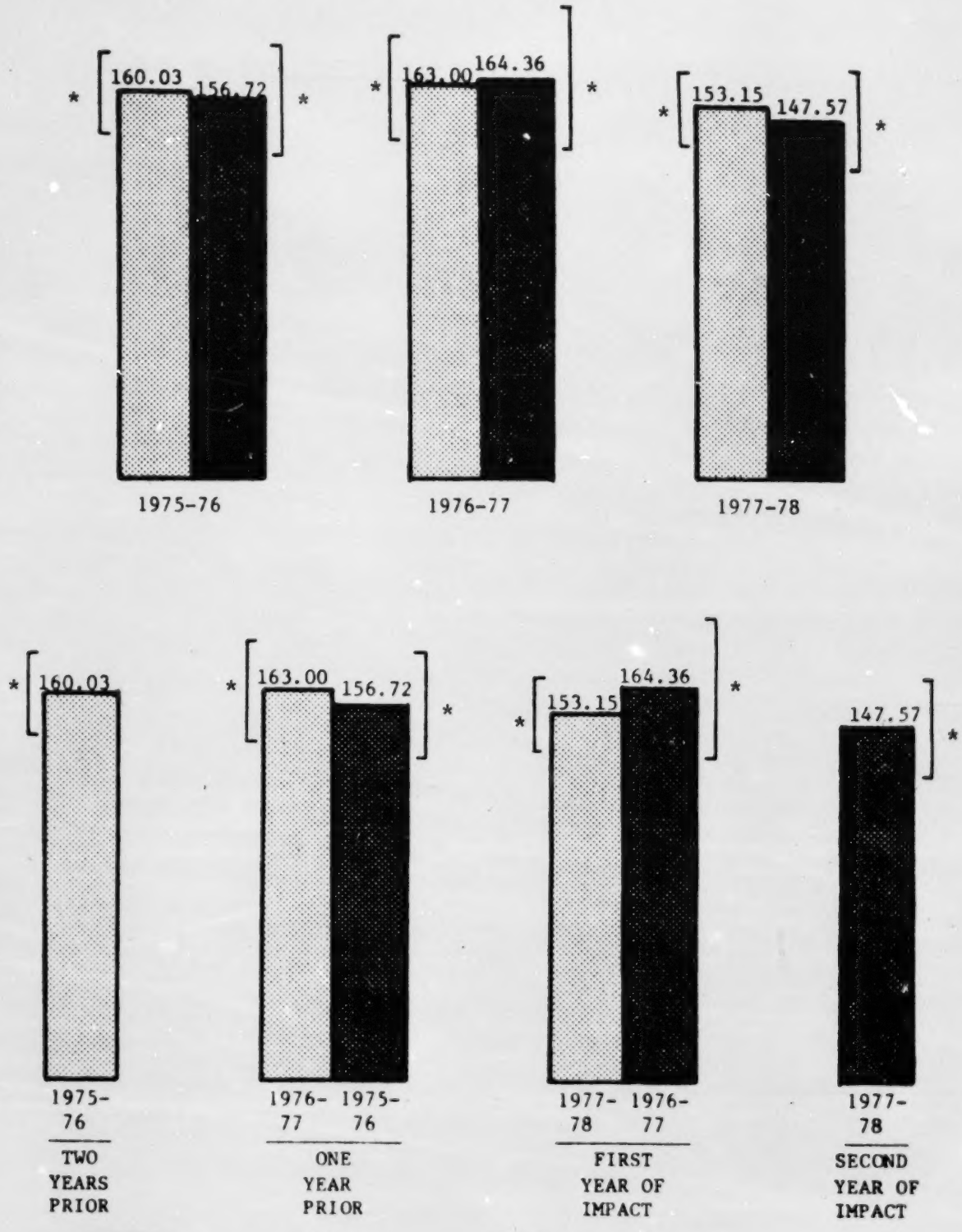
	Migrant Students in First Year* Impact Schools (n=26)		Migrant Students in Second Year** Impact Schools (n=47)	
	Number of Days Enrolled		Number of Days Enrolled	
	Mean	(Standard Deviation)	Mean	(Standard Deviation)
Two years prior to impact	160.03	(34.00)	--	--
One year prior to impact	163.00	(42.67)	156.72	(43.29
First year impact	153.15	(31.15)	164.36	(57.98)
Second year impact	--	--	147.57	(40.80)

* Data from 12 target schools
** Data from 2 target schools

Target migrant students do not show statistically greater numbers of days of enrollment with initiation of their participation in the secondary impact program, nor a continued increase or maintenance in numbers of days of enrollment in the

NUMBER OF DAYS ENROLLED FOR MIGRANT STUDENTS,

GRADES 9 - 12, PARTICIPATING IN THE WORK STUDY PROGRAM ON FEBRUARY 1, 1978



* Variance Estimate

second year of the program. The variations among the years (pre-impact and during impact) are considerably smaller than the variations among individual students. For all practical purposes, school enrollment days per target student must be seen as not having substantially changed within the three year period examined.

Conclusion

No evidence for a substantive increase, or a change in school enrollment days for students participating directly in the secondary impact program, has been found.

IV. MIGRANT ENROLLMENT IN TYPES OF COURSES IN SCHOOLS (SCHOOL PROGRAM) VARIABLE

Methodology and Definitions

Ira Nelken & Associates, Inc. personnel contacted and visited each treatment and comparison school. They talked to qualified school personnel and analyzed official high school transcripts and school catalogues. They were then able to classify each course each migrant student had taken each semester as, either a vocational education course, a college preparatory course, a university preparatory course or an "other" course.

Definitions/descriptions and examples of each course category follow:

Vocational Classes include courses which introduce the student to the practice of skills related to particular careers or areas of study not otherwise considered academic, yet involving useful and practical knowledge. Also includes work-study, work-experience, R.O.P., and other similar programs. If a student was enrolled in more than one period, the number recorded was equal to the number of periods taken.

Examples of vocational classes: auto mechanics; wood shop; welding; business courses (typing, accounting, shorthand, etc.); home economics (sewing, cooking, nutrition); teachers aide; office assistant; and agriculture courses.

College Preparatory Courses include classes beyond the basic or first year of study that introduce college level skills in any academic department. There were exceptions made concerning certain subjects such as foreign languages. (Must have two years of any language for college preparatory.) Beyond two years of Spanish was considered college preparatory.

Examples of classes requiring at least second year: English II, Algebra I and II (not acceptable - Basic Math, English I, Freshman Geography, Reading, etc.)

Examples of classes acceptable in first year: World History, Civics, Biology, Earth Science, and Geometry.

University Preparatory Courses includes those classes of a very advanced level or of a difficult nature that are considered prerequisites to University study in fields such as Science and Math.

Examples: Chemistry, Advanced Senior Math, Calculus, and Physics.

Other Classes includes courses that are elective courses that the student takes for personal interest and are not considered college preparatory, university preparatory or vocational. Such classes are Physical Education, Music, Drama, Art, etc. These classes include very basic graduation requirements.

The Total of all Categories corresponds to the total number of classes (Fall and Spring) the student was enrolled in.

Analysis of Data Collected

The table on the following page and the graphic display which follows the table, indicate for each of three studied groups of migrant students in grades 9-12, percentages of vocational courses, college preparatory courses, and university preparatory courses taken compared to total courses taken by sex of student (males and females). The three studied groups were: (1) migrant students in work study programs at target impact schools, (2) other migrant students at target impact schools, and (3) migrant students at comparison non-impact schools.

PERCENTAGE COURSES TAKEN

VOCATIONAL EDUCATION, COLLEGE PREPARATORY, AND UNIVERSITY PREPARATORY,

BY MIGRANT STUDENTS IN GRADES 9 - 12

COMPARED BY

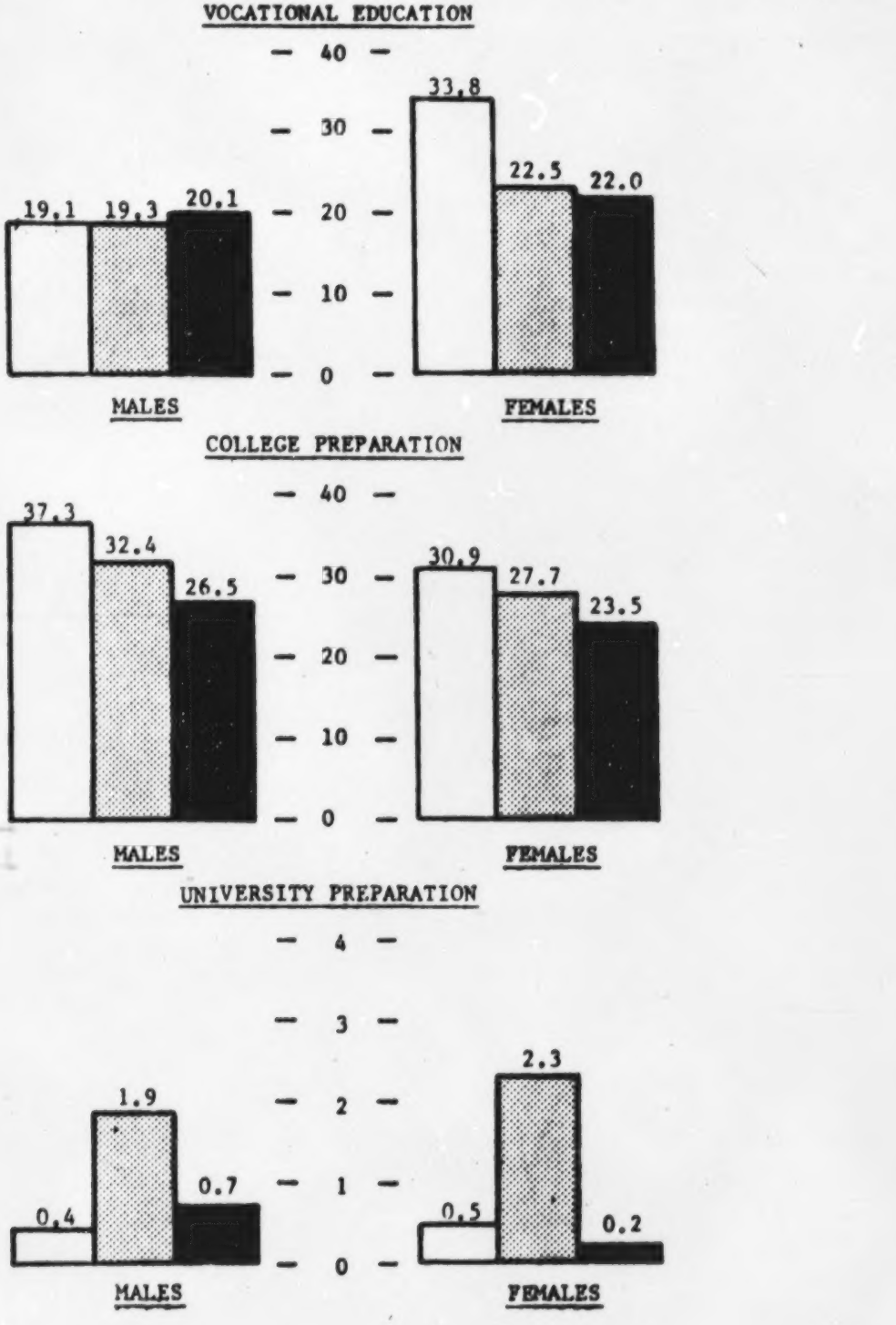
MIGRANT STUDENTS IN WORK STUDY PROGRAMS AT TARGET IMPACT SCHOOLS,

OTHER MIGRANT STUDENTS AT TARGET IMPACT SCHOOLS

AND MIGRANT STUDENTS AT COMPARISON NON-IMPACT SCHOOLS

STATISTIC	Work Study Migrant Students in Target Impact Schools			Other Migrant Students in Target Impact Schools			Migrant Students in Non-Impact Comparison Schools		
	Males	Females	Totals	Males	Females	Totals	Males	Females	Totals
N(Population Size)	60	73	133	266	239	505	252	253	505
Total Number of Courses Taken	681	868	1549	2929	2648	5577	2571	2888	5459
Percent Courses Vocational Education	19.1%	33.8%	27.3%	19.3%	22.5%	20.8%	20.1%	22.0%	21.1%
Percent Courses College Preparatory	37.3%	30.9%	33.7%	32.4%	27.7%	30.1%	26.5%	23.5%	24.9%
Percent Courses University Preparatory	0.4%	0.5%	0.5%	1.9%	2.3%	2.1%	0.7%	0.2%	0.5%

PERCENTAGE COURSES TAKEN
VOCATIONAL EDUCATION, COLLEGE PREPARATORY, AND UNIVERSITY PREPARATORY,
BY MIGRANT STUDENTS IN GRADES 9-12
COMPARED BY
MIGRANT STUDENTS IN WORK STUDY PROGRAMS AT TARGET IMPACT SCHOOLS,
OTHER MIGRANT STUDENTS AT TARGET IMPACT SCHOOLS
AND MIGRANT STUDENTS AT COMPARISON NON-IMPACT SCHOOLS



Work Study Students/ Impact Schools

Non-Work Study Students/ Impact Schools

Comparison Students/ Non-Impact Schools

Little difference is noted for male migrant students among the three groups, work study, non-work study at impact schools, and comparison non-impact group in percentage of vocational education courses taken. A substantial difference among male groups, was noted on percentage of college preparatory classes taken. Work study males took considerably more college preparatory classes than did non-work study males at impact schools, who took considerably more college preparatory classes than did non-impact comparison group males. A difference among male groups was also noted on percentage of university preparatory courses taken. Non-work study males at impact schools took more university preparatory courses than did either work study males or comparison group males.

The pattern was not the same for females. A substantive difference among female groups was indicated in percentage of vocational education classes taken. Work study females took considerably more vocational classes than did either non-work study females at impact schools or comparison group females. Less difference was seen among female group percentages in percentage of college preparatory courses taken. Work study females took relatively more college preparatory courses than did non-work study females at impact schools, who took relatively more college preparatory courses than did comparison group females. A difference among female groups were also noted on percentage of university preparatory courses taken. Non-work study females at impact schools took more university preparatory courses than did either work study females or comparison group females.

Conclusions

1. Treatment group migrant students, both male and female students in migrant work study programs, at treatment schools, showed the pattern of taking greater percentages of college preparatory classes than their non-work study migrant peers at their same schools, and much greater percentages of college preparatory classes than migrant comparison group students.

Participation in work study seems to increase the proportion of college preparatory classes a student will take in high school compared to his peers at the same school, and compared to a like comparison school. A student attending an impact school also tends to take a higher percentage of college preparatory courses. This may be an effect of school advisors, counselors, and teachers becoming more aware of migrant student's potentials as a result of the experimental program.

2. Treatment group migrant students, both males and females, in migrant work study programs at impact schools take the same percentage of university preparatory classes as do comparison group students. Non-work study migrant students at impact schools, however, take three or four times the percentage of university preparatory courses as do the other two groups.

Work study does not seem to directly change the proportion of university preparatory classes a student will take in high school. Non-work study students in treatment schools (who are usually less likely to be labeled as potential dropouts and are also labeled as better scholars) may be, as a side effect of the special impact program, increasing their percentage of university preparatory courses taken. Once again, this may be an effect of school advisors, counselors, and teachers becoming more aware of migrant children's potentials as a result of the experimental program.

3. Male and female groups studied were seen to be different on percentage of vocational education courses taken. No real difference among male groups was noted on percentage of vocational education courses taken, however, female treatment group, female work study migrant students at impact schools took considerably greater percentages of vocational courses than did other female groups.

Work study does not seem to change the proportion of vocational courses males will take in high school, but seems to increase the proportion of vocational courses a female student will take in high school compared to her peers at the same school and compared to a like comparison group at other schools. This may be due to the role female migrants are expected to play after graduation. Immediate job potential may be more important than going to college. Immediate skills and knowledge for earning money and the need to take care of home and children may be more valued and required than delayed marketable skills and greater job potential achievable through higher education.

V. MIGRANT STUDENTS GRADUATING HIGH SCHOOL VARIABLE

Methodology

Ira Nelken & Associates, Inc. personnel contacted and visited with each treatment and comparison school. They collected information on numbers of migrant twelfth grade students graduating in 1975-76, 1976-77, and 1977-78 from all schools in the target and comparison samples. They also collected information on numbers of migrant students graduating in 1974-75 from the two second year impact schools and their comparison schools. School personnel (primarily counselors, advisors, and administrators) also responded to whether each 1977-78 high school senior, in February 1978 and May 1978, was expected to graduate in June 1978.

Analysis of Data Collected -- Number of Migrants Graduating From High School

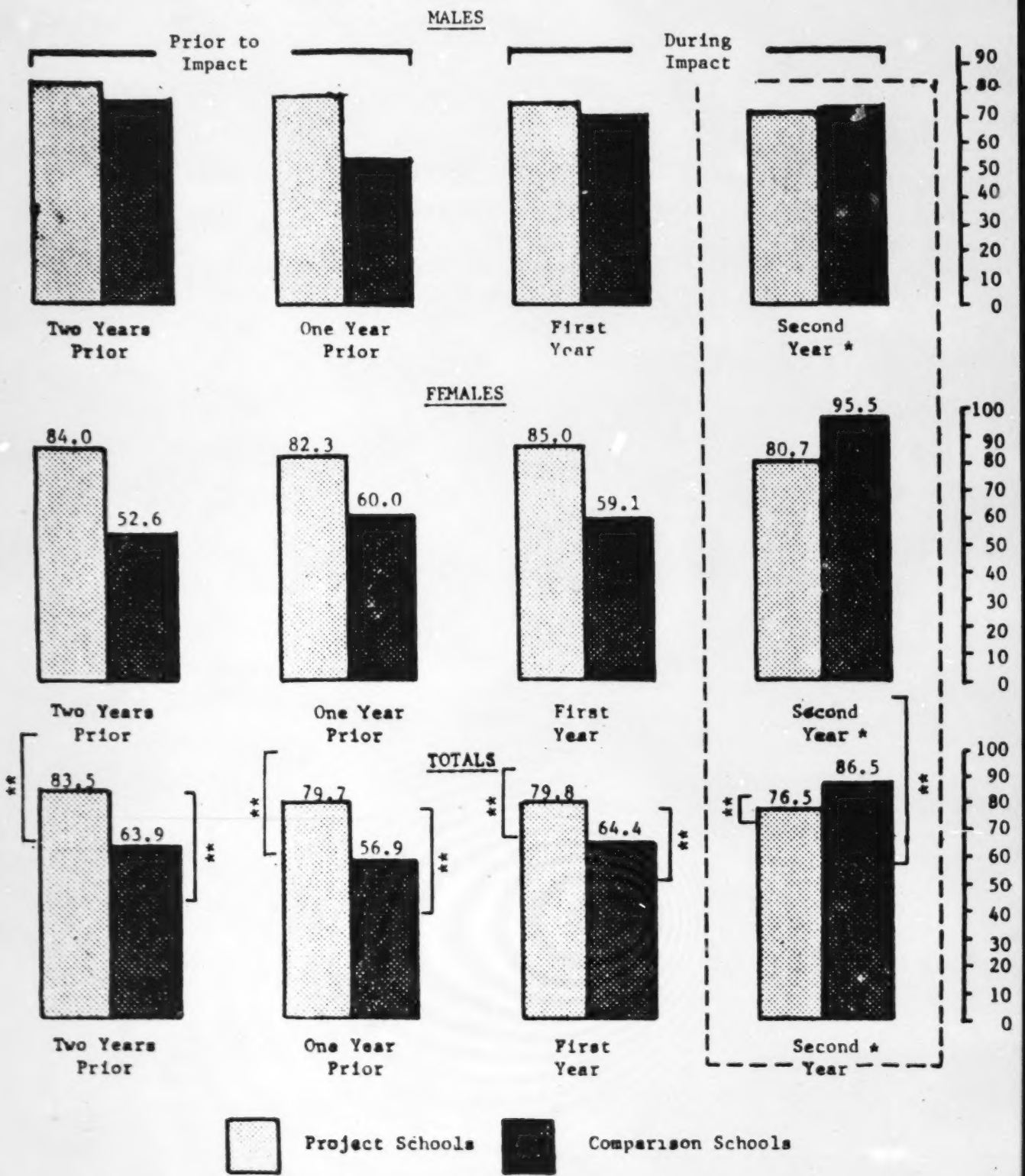
The table on the following page, and the graphic display which follows the table, indicate, for each group, percentage of twelfth graders who graduated in June. The two groups studied were all twelfth grade migrants in comparison schools by sex of student (males vs. females). Groups were compared: (1) two years prior to implementation of treatment in the schools; (2) one year prior to implementation of treatment in the schools; (3) first year of implementation of impact programs; and, (4) (for two schools in each group) second year of implementation of impact program.

PERCENTAGE OF TWELFTH GRADE MIGRANTS GRADUATING
IN TARGET SCHOOLS AND COMPARISON SCHOOLS
TWO YEARS AND ONE YEAR PRIOR TO IMPACT PROGRAM IMPLEMENTATION,
AND FIRST AND SECOND YEAR OF PROGRAM IMPLEMENTATION

Year	Stat.	Target Schools			Comparison Schools		
		Males	Females	Totals	Males	Females	Totals
Two Years Prior to Work Study	N % Graduating	41 82.9%	50 84.0%	91 83.5% (37.2)**	17 76.5%	19 52.6%	36 63.9% (40.6)**
One Year Prior to Work Study	N % Graduating	56 76.8%	62 82.3%	118 79.7% (38.7)**	35 54.3%	30 60.0%	65 56.9% (38.0)**
First Year of Work Study	N % Graduating	64 75.0%	60 85.0%	124 79.8% (23.0)**	43 69.8%	44 59.1%	87 64.4% (26.2)**
Second Year* of Work Study	N % Graduating*	25 72.0%	26 80.7%	51 76.5% (10.0)**	15 73.3%	22 95.5%	37 86.5% (61.0)**

* Data from two target and two comparison schools only.
** Variance estimate.

PERCENTAGE OF TWELFTH GRADE MIGRANTS GRADUATING
IN TARGET SCHOOLS AND COMPARISON SCHOOLS
TWO YEARS AND ONE YEAR PRIOR TO IMPACT PROGRAM IMPLEMENTATION,
AND FIRST AND SECOND YEAR OF PROGRAM IMPLEMENTATION



* Data from two target and two control schools
** Variance estimate

Data from second year of work study program implementation is limited. Only 2 of 14 schools in each group have reached the second year of implementation category to date. The population size for this "second year" data is considerably smaller than for data from other years. Conclusions about "second year" trends are therefore open to question and are best left moot until further data is available from programs in the 1978-79 academic year.

Target group schools have, for all three years, (two years prior, one year prior, and first year implementation) greater percentages of migrants graduating from high school than do comparison group schools. This statement is true for both male migrants and female migrants.

A calculation of the variance among schools in each group reveals very large variances within each group. For instance, for data "two years prior to work study program implementation," target schools show a variance of 37.2% and comparison schools show a variance of 40.6%. The sets of schools (target vs. comparison) cannot be said to be statistically significantly different. The sets of schools will therefore be considered comparable.

Unfortunately, such large variances within groups mean that little data interpretation becomes possible.

Twenty percentage points difference in mean scores between groups can be equally attributed to real differences between groups or to statistical fluctuations (variance) within a group. Though the tables and graphics suggest

that the target migrant students graduate more often than the comparison migrant students graduate, this conclusion cannot yet be sustained. Within the variances developed, the groups must be assumed to differ little from one another, both prior to impact program implementation and since implementation.

Variance within group does get smaller in the first year of impact program implementation for both groups. Schools are therefore showing less variation from one another in the percentages of migrants graduated (consistency among group school data is developing).

Conclusion

Data do not allow for a determination as to whether or not impact programs graduate more senior migrant students than do comparison schools. Little difference between males and females can be noted at this time. Another year of study might allow for elucidation of whether or not differences between treatment and comparison groups exist (if variations among each group continue to decline).

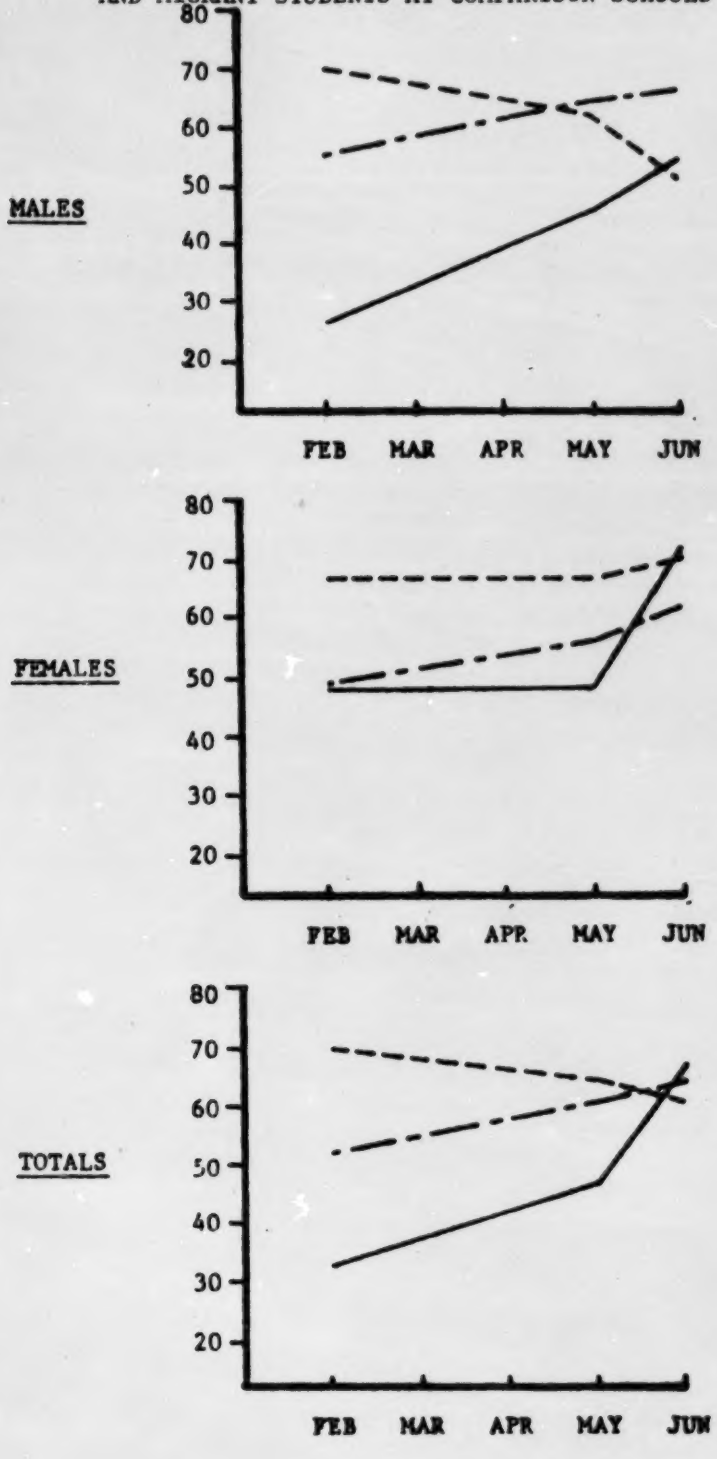
Analysis of Data Collected -- Perception of School Personnel as to Whether Migrant Students Will Graduate in June

The table on the following page and the graphic display which follows the table, indicate for each of three groups school personnel perceptions of the percentage of male and female migrant students expected to graduate and actually graduating from high school in 1977-78. The three groups were: (1) migrant work study participants within target work study schools, (2) other migrant students within target work study schools, and (3) migrant students at comparison schools.

SCHOOL PERSONNEL PERCEPTION OF PERCENTAGE MIGRANT STUDENTS
EXPECTED TO GRADUATE AND ACTUALLY GRADUATING FROM HIGH SCHOOL IN 1977-78,
COMPARED BY
MIGRANT STUDENTS IN WORK STUDY PROGRAMS AT TARGET SCHOOLS,
OTHER MIGRANT STUDENTS AT TARGET SCHOOLS,
AND MIGRANT STUDENTS AT COMPARISON SCHOOLS

Statistic	Work Study Migrant Students In Target Schools			Other Migrant Students In Target Schools			Migrant Students In Comparison Schools		
	Males	Females	Totals	Males	Females	Totals	Males	Females	Totals
N (Population Size)	11	25	36	47	39	86	37	43	80
Percent Predicted In February, 1978 To Graduate In June 1978	27.3%	48.0%	33.3%	55.3%	48.7%	52.3%	70.3%	67.4%	69.8%
Percent Predicted In May, 1978 To Graduate In June, 1978	45.5%	48.0%	47.2%	63.8%	56.4%	60.5%	62.2%	67.4%	65.0%
Percent Actually Graduating In June, 1978	54.5%	72.0%	66.7%	66.0%	61.5%	64.0%	51.4%	69.8%	61.3%

SCHOOL PERSONNEL PERCEPTION OF PERCENTAGE MIGRANT STUDENTS EXPECTED TO GRADUATE AND ACTUALLY GRADUATING FROM HIGH SCHOOL IN 1977-78, COMPARED BY MIGRANT STUDENTS IN WORK STUDY PROGRAMS AT TARGET SCHOOLS, OTHER MIGRANT STUDENTS AT TARGET SCHOOLS, AND MIGRANT STUDENTS AT COMPARISON SCHOOLS



——— Target Schools, Work Study students
—·—·— Target Schools, Non-Work Study students
- - - - - Comparison Schools

The graphics clearly indicate that migrant students (either in the work study program or not) at treatment schools are less often expected to graduate than migrant students at comparison schools. Many fewer migrants (both male and female) on work study at treatment schools are expected to graduate than actually do. To a lesser extent, this expectation is true of other migrant students at treatment schools as well. Male migrant students at comparison schools do not graduate as often as they are expected to. Female migrant students at comparison schools are judged rather accurately. The percentage of migrants who actually do graduate does not differ substantially among the three groups, for either males or females (see discussion on variances in previous section).

For male migrant students in treatment schools, school personnel, who made their first estimate in February, have seen by May that they misjudged male students. They revise their graduation estimates considerably higher. School personnel, however, continue their low expectations with respect to graduation of female migrants, especially for those on work study.

Conclusions

All three groups of migrants; those on work study in impact schools other migrants at impact schools, and migrants in comparison schools graduated with approximately the same degree of frequency in 1977-78 (within 5.4 percentage points of one another). Migrant students, both male and female, and especially work study students, at treatment schools, are quite often unrealistically perceived by school personnel as not going to graduate. Male migrant students at comparison schools are quite often perceived unrealistically as going to graduate, whereas female migrant students at comparison

schools are perceived quite realistically with respect to whether they will graduate or not. By May of the year, perception of migrant male students has been revised considerably in a realistic direction, but perception of female work study migrant students at impact schools is still drastically incorrect.

One might wonder if school personnel perception of the role female migrant students are expected to play after the end of the twelfth grade year doesn't bias personnel in judging whether female migrant students will graduate high school.

The change between graduating percentages perceived in February, and actual graduating percentages in June for migrants in impact programs, seems to be due to two factors. One is inherent bias in perceptions against migrants by school personnel. The other is the positive effect of the impact program on producing graduates. It is not possible, from this study, to determine the degree to which each effects the happy outcome of migrant students graduating from high school, though both must have a considerable effect.